

**To:** Mosal, Jeffrey[Mosal.Jeffrey@epa.gov]  
**From:** Jeffrey Mosal  
**Sent:** Tue 8/6/2013 5:21:25 PM  
**Subject:** Fw: Upper Animas October 2012 Results Maps

Jeff Mosal  
Environmental Protection Specialist  
US EPA Region 8, 8EPR-S  
1595 Wynkoop Street  
Denver, CO 80202  
303-312-6802

----- Forwarded by Jeffrey Mosal/R8/USEPA/US on 08/06/2013 11:21 AM -----

From: Scout Dellamia/R8/USEPA/US  
To: Jeffrey Mosal/R8/USEPA/US@EPA  
Date: 02/06/2013 04:06 PM  
Subject: Re: Fw: Upper Animas October 2012 Results Maps

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Hi Jeff-  
I forwarded this on to Ryan Bahnfleth (312.7723) in our GIS department. I think he's the one to be in communication with about load calcs.

Thanks,  
Scout Dellamia  
Environmental Scientist - TechLaw, Inc.  
EPA Region 8 Laboratory  
Golden, CO  
direct - 303.312.7047  
fax - 303.312.7801

▼ Jeffrey Mosal---02/06/2013 04:02:29 PM---Please let me know who I should direct them to. GIS?  
Thanks, Jeff Mosal Superfund Data Manager

From: Jeffrey Mosal/R8/USEPA/US  
To: Scout Dellamia/R8/USEPA/US@EPA  
Date: 02/06/2013 04:02 PM  
Subject: Fw: Upper Animas October 2012 Results Maps

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Please let me know who I should direct them to. GIS?

Thanks,  
Jeff Mosal  
Superfund Data Manager

-----Forwarded by Jeffrey Mosal/R8/USEPA/US on 02/06/2013 04:01PM -----  
To: Jeffrey Mosal/R8/USEPA/US@EPA, John Wieber/R8/USEPA/US@EPA, Dan  
Wall/R8/USEPA/US@EPA, Donald Goodrich/R8/USEPA/US@EPA  
From: Michael Holmes/R8/USEPA/US  
Date: 02/06/2013 03:46PM  
Cc: Steven Way/R8/USEPA/US@EPA  
Subject: Fw: Upper Animas October 2012 Results Maps

Peter Butler from the Animas River Stakeholder Group, has a question concerning the load calcs for the Oct. maps. I'm not sure who is best to answer this over at ESAT. Let me know and I will get back to Peter.

thanks,

Mike Holmes  
US EPA, EPR-SR  
1595 Wynkoop St.  
Denver, CO 80202  
phone: 303-312-6607  
mobile: 720-480-2793

----- Forwarded by Michael Holmes/R8/USEPA/US on 02/06/2013 03:12 PM -----

From: "Peter Butler" <butlerpeter2@gmail.com>  
To: Michael Holmes/R8/USEPA/US@EPA  
Cc: "Steve Fearn" <fearneng@rmi.net>, <wsimon@frontier.net>  
Date: 02/06/2013 02:58 PM  
Subject: RE: Upper Animas October 2012 Results Maps

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Mike – I don't understand how the loading is calculated. Generally, one would multiply the concentration times the flow times a conversion factor to get load. When I rearrange the equation – concentration times flow /load = conversion factor, I get very different conversion factors at different sites. That could be explained if the total zinc concentration was quite a bit different than the dissolved zinc concentration and the dissolved is being reported. However at cc18 and cc18b, the pH's are quite low and one would expect dis. Zinc and total zinc concentrations to be close. One would expect that zinc load at cc18 would be higher than the load at cc18b because both the concentration and the flow is higher at cc18.

Peter Butler  
970-259-0986

**From:** Holmes.Michael@epamail.epa.gov [mailto:Holmes.Michael@epamail.epa.gov]  
**Sent:** Wednesday, February 06, 2013 2:41 PM  
**To:** Peter Butler  
**Cc:** 'Steve Fearn'; wsimon@frontier.net

**Subject:** RE: Upper Animas October 2012 Results Maps

Hopefully, Rob Runkles loading model will help explain this.

Good to see some consistency w/ the May sampling.

Mike Holmes  
US EPA, EPR-SR  
1595 Wynkoop St.  
Denver, CO 80202  
phone: 303-312-6607  
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▼ "Peter Butler" ---02/06/2013 02:35:17 PM---Thanks Mike - just like the May sampling, this shows a very large , unknown zinc source around the c

From: "Peter Butler" <[butlerpeter2@gmail.com](mailto:butlerpeter2@gmail.com)>  
To: Michael Holmes/R8/USEPA/US@EPA, <[wsimon@frontier.net](mailto:wsimon@frontier.net)>, "Steve Fearn" <[fearneng@rmi.net](mailto:fearneng@rmi.net)>  
Date: 02/06/2013 02:35 PM  
Subject: RE: Upper Animas October 2012 Results Maps

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Thanks Mike – just like the May sampling, this shows a very large , unknown zinc source around the confluence of Cement Creek and South Cement Creek.

Peter Butler  
970-259-0986

**From:** [Holmes.Michael@epamail.epa.gov](mailto:Holmes.Michael@epamail.epa.gov) [mailto:[Holmes.Michael@epamail.epa.gov](mailto:Holmes.Michael@epamail.epa.gov)]  
**Sent:** Wednesday, February 06, 2013 1:10 PM  
**To:** Peter Butler; [wsimon@frontier.net](mailto:wsimon@frontier.net); Steve Fearn  
**Subject:** Fw: Upper Animas October 2012 Results Maps

Attached are the maps of sample results for the Oct. sampling event. We are going to add Aluminum to the maps, and I wanted to send them to you before they are finalized, incase you had any additional edits. We also be included a map showing the downstream sample locations in the Animas.

There are numerous other sample locations that are not on the map to support the USGS modelling, but for the mapping we are just presenting the locations consistent w/ the past sampling events.

Let me know if you have any edits.

Thanks,

Mike Holmes  
US EPA, EPR-SR

1595 Wynkoop St.  
Denver, CO 80202  
phone: 303-312-6607  
mobile: 720-480-2793

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*(See attached file: UpperAnimas\_Results\_2013Jan.pdf)(See attached file:  
UpperCement\_Results\_2013Jan.pdf)*